

obtaining a plurality of inner parity blocks (PI blocks) by segmenting the error correction block in an inner parity (PI) direction into x segments, wherein x is an integer equal to or greater than 2;

generating e -byte PI for each of the plurality of PI blocks generated by segmenting, and adding the PIs in the PI direction; and

generating f -byte outer parity (PO) in a PO direction of the error correction block having PIs, and adding the POs in the PO direction.

2. (ONCE AMENDED) The error correction method of claim 1, wherein the PIs are Reed-Solomon codes and satisfy $(n/x) + e \geq 256$.

10. (ONCE AMENDED) The error correction method of claim 7, wherein the interleaving further comprises reallocating a plurality of PIs (PI0, PI1, ..., PI n/x) by gathering bytes having a same order in bytes included in each of the plurality of PIs, thereby forming reallocated PI groups.

15. (ONCE AMENDED) The error correction method of claim 4, wherein $n \times m$ is a basic address unit recorded on a disk, the method further comprising:

dividing the error correction block into a plurality of data frames, each of the data frames comprising a 4-byte ID, a 2-byte IED, an 18-byte RSV, two 2-KB user data blocks, and two 4-byte EDCs.

17. (ONCE AMENDED) The error correction method of claim 16, wherein $(n/x) + e \geq 256$ so that an operation in a Galois Field is performed.